

Steps to Prevent Water Pollution

- Step 1** – Use Best Management Practices (BMPs) for amalgam and silver waste.
- Step 2** – Install and maintain an approved amalgam separator.
- Step 3** – Train staff and maintain training records. Keep records for 5 years or as required by your local sewer agency.
- Step 4** – Your local sewer agency may request a periodic appointment to review and inventory use of BMPs, waste disposal logs, amalgam separator maintenance, and training records.

Frequently Asked Questions

Are these practices mandatory? Because of mercury pollution issues in the San Francisco Bay, all Bay Area agencies encourage, at a minimum, amalgam Best Management Practices (BMPs) and installation of amalgam separators. Many agencies are moving toward mandatory use of amalgam BMPs and installation of amalgam separators. To find out if this is the case in your area, contact your sewer agency. For a list of agencies, their service areas, and contacts, see our website: www.baywise.org

How do we dispose of our collected amalgam and x-ray fixer waste? Have a licensed recycling contractor, mail-in service, or hazardous waste hauler remove your amalgam waste.

How do I find a waste hauler? The American Dental Association maintains a list of amalgam waste haulers. To find a link to this information, see www.baywise.org

What are the approved amalgam separators? See our website for a list of approved separators: www.baywise.org

Can we use a Household Hazardous Waste facility for disposal of waste amalgam and x-ray fixer? As a very small quantity generator (VSQG) of hazardous waste, this may be an option for you. The disadvantages of this alternative are that you are personally responsible for transporting the waste and there are limited appointments available that typically must be scheduled in advance.

For more information, and links to other references, see www.baywise.org and click on “Dental Office Resources.”



Bay Area Clean Water Agencies (BACWA) is a joint public powers authority whose members include public utilities that collect and treat municipal wastewater from the nine Bay Area counties that surround the San Francisco Bay. BACWA is dedicated to working with our member agencies, the state and federal governments, and non-governmental organizations to deliver the best information about the water quality of the San Francisco Bay.

The **Bay Area Pollution Prevention Group (BAPPG)** is a committee of BACWA that develops Bay-wide pollution prevention programs. To this end, BAPPG has initiated a public education and information program directed to the public on how to prevent pollution through individual housekeeping practices.

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Water agency: staple business card or apply sticker with contact info here



Dental Offices and Water Pollution Control

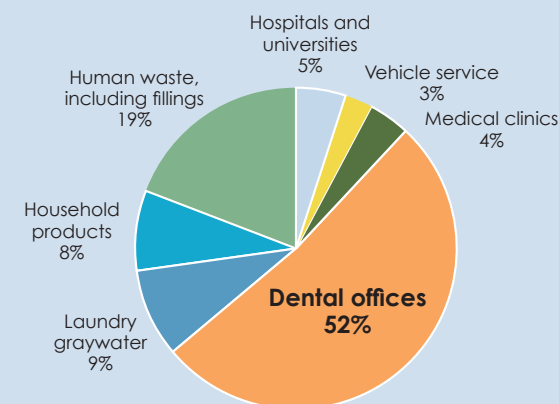
Your vacuum lines, sinks, and toilets all lead to local sewer lines. Anything you pour down the drain goes to a wastewater treatment plant before being discharged to San Francisco Bay. Because these treatment facilities are not designed to remove metals like mercury and silver, wastewater treatment agencies seek your support to comply with regulatory permits. Protecting the Bay is important because of elevated mercury observed in fish.

Metals rinsed down drains...



may reach the Bay

Mercury Sources to a Wastewater Treatment Plant



In the absence of dental Best Management Practices and amalgam separators, mercury amalgam waste from dental offices is estimated to be the single largest source of mercury to wastewater treatment plants.

Dental Amalgam

A variety of amalgam waste is generated at a dental office:

- scrap amalgam
- used, leaking, or unusable amalgam capsules
- amalgam captured in chairside traps and vacuum pump screens, including the traps and screens themselves
- amalgam separator waste
- “contact amalgam,” including teeth with amalgam restorations

X-Ray Fixer

Your x-ray fixer waste includes silver, another metal that can impact San Francisco Bay. Do not pour it down the drain. Collect and manage as a hazardous waste. (Details inside)



GRAPH: LARRY WALKER ASSOCIATES, MERCURY SOURCE CONTROL AND POLLUTION PREVENTION EVALUATION, FINAL REPORT, PREPARED FOR NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES, 2002

Best Management Practices (BMPs) in dental offices help protect San Francisco Bay

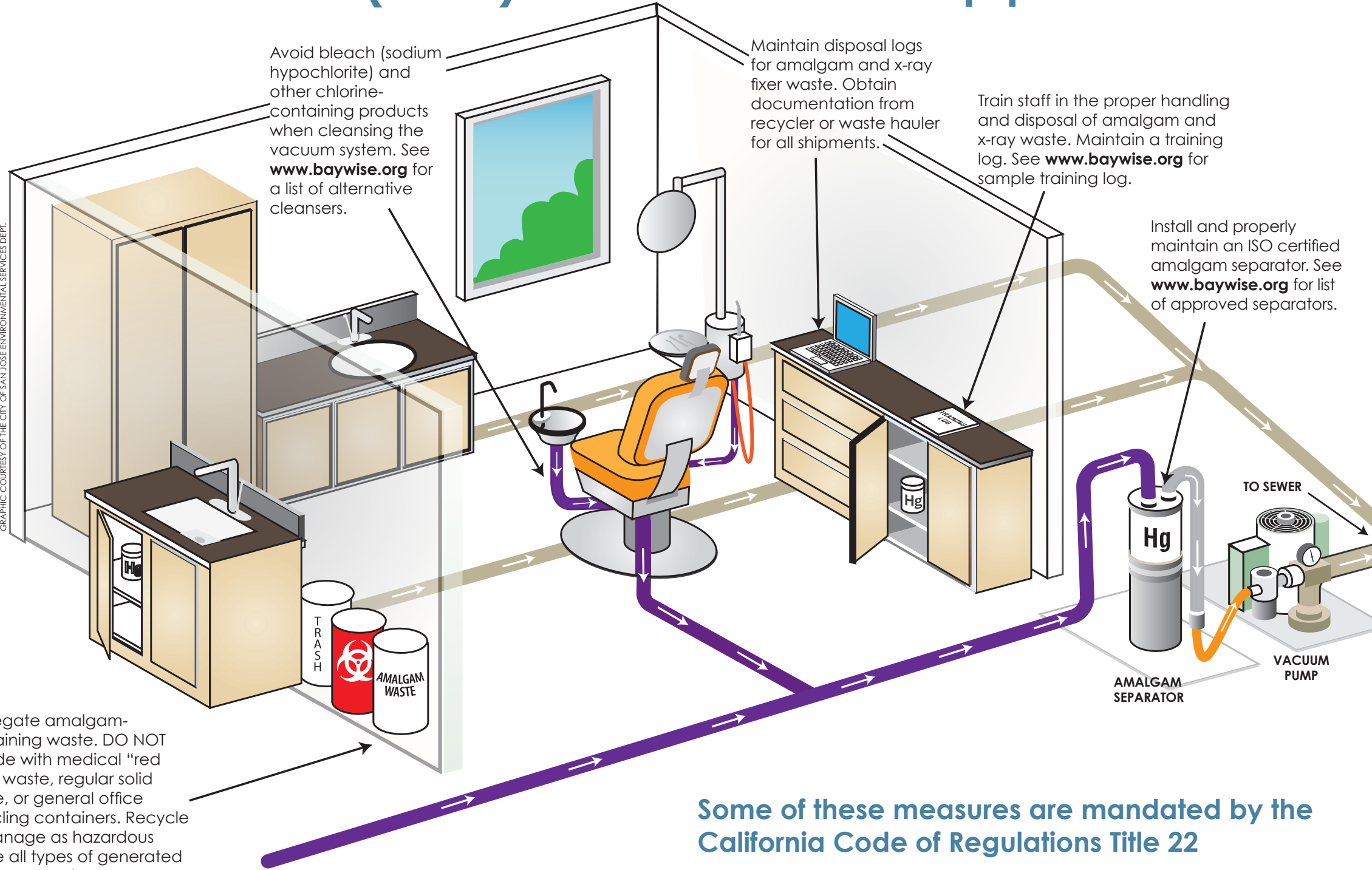


Use precapsulated amalgam. Limit amount of amalgam triturated. Keep a variety of capsule sizes. Discontinue use of bulk liquid mercury.



Change chairside traps frequently. Store traps and contents with amalgam waste. Never rinse traps in the sink.

GRAPHIC COURTESY OF THE CITY OF SAN JOSÉ ENVIRONMENTAL SERVICES DEPT.



Segregate amalgam-containing waste. DO NOT include with medical "red bag" waste, regular solid waste, or general office recycling containers. Recycle or manage as hazardous waste all types of generated amalgam waste.

Avoid bleach (sodium hypochlorite) and other chlorine-containing products when cleansing the vacuum system. See www.baywise.org for a list of alternative cleansers.

Maintain disposal logs for amalgam and x-ray fixer waste. Obtain documentation from recycler or waste hauler for all shipments.

Train staff in the proper handling and disposal of amalgam and x-ray waste. Maintain a training log. See www.baywise.org for sample training log.

Install and properly maintain an ISO certified amalgam separator. See www.baywise.org for list of approved separators.



Dry vacuum system: Have a qualified maintenance technician, amalgam recycler, or hazardous waste disposal service pump out and clean the air-water separator tank.



Wet vacuum system: Change pump screen as needed or directed by manufacturer. Seal plastic container with screen and contents (including any water that may be present) and store with amalgam waste. Do not rinse contents down sink or other drain.

Some of these measures are mandated by the California Code of Regulations Title 22



Store amalgam waste in air-tight containers, following recycler's or waste hauler's instruction for separation of contact and non-contact amalgam. Do not add water or bleach.



Properly dispose of x-ray fixer, using licensed waste hauler to recycle or dispose as hazardous waste. Due to the high silver content, never pour fixer down the sink.



Glutaraldehyde- or formaldehyde-based cold sterilization chemicals must be chemically neutralized or otherwise deactivated before discharging to the sink; otherwise, have them picked up as hazardous waste.